Sheet <u>1</u> of <u>3</u>

Modified Form PTO-1449

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

NOV 2 3 1998 3

ATTY. DOCKET NO. 10020/11901

APPLICATION NO. 09/136,342

APPLICANT FORREST et al.

GROUP 2100

GROUP ART UNIT -2875 1774

U. S. PATENT DOCUMENTS

FILING DATE 08/19/1998

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
Mey	4,125,414	Nov. 14, 1978	Tang et al.			Mar. 13, 1978
	4,164,431	Aug. 14, 1979	Tang			May 18, 1978
	4,255,211	Dec. 31, 1979	Fraas			Dec. 31, 1979
	5,315,129	May 24, 1994	Forrest et al.	257	21	May 1, 1991
	5,457,565	Oct. 10, 1995	Namiki et al.	.359	213	Nov. 18, 1993
	5,703,436	Dec. 30, 1997	Forrest et al.	313	506	Mar. 6, 1996
	5,714,838	Feb. 3, 1998	Haight et al.	313	506	Sep. 20, 1996
	5,953,587	09/14/99	Forcest et al.	438	99	11/24/97
Mey	5,953,587 6,013,538	09/14/99	Burrows et al.	438	22	11/24/97
7		•				
	·					
		_				
						-
	L			<u> </u>		<u> </u>

⁻ If appropriate

FOREIGN PATENT DOCUMENTS

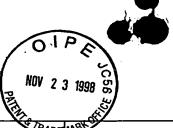
EN AN COURD	DOGUNATRIT					TRANSLATION	
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
			_				

* - Abstract

32845-1

Marie R. Yamint gly

01/27/00





OTHER	DOCUMENTS

	tiled 08/19/98
EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, OTC.
MRY	FORREST et al., U.S. Patent Appln. Serial No.136,166, "Organic Photosonsitive Optoclectronic Devices With A Top- Transparent Electrode", filed August 19, 1998-
	FORREST et al., U.S. Patent Appln. Serial No.136,377, "Stacked Organic Photosensitive Optoelectronic Devices With -An Electrically Series Configuration", filed August 19, 1998
	FORREST et al., U.S. Patent Appln. Scrial No.136,165, "Stacked Organic Photosensitive Optoelectronic Devices With- An Electrically Parallel Configuration", filed August 19, 1998
	FORREST et al., U.S. Patent Appln. Serial No.136,164, "Organic Photosensitive Optoelectronic Devices With A Mixed Electrical Configuration", filed August 19, 1998
	FORREST et al., U.S. Patent Appln. Serial No. 976,666, "Method for Deposition and Patterning of Organic Thin Film" filed Nov. 24, 1997
	FORREST et al., U.S. Patent Appln. Serial No. 977,205, "Method of Fabricating and Patterning OLEDs", filed Nov24,-1997 -
	PARTHASARATHY et al., U.S. Patent Appln. Serial No. 054,707, "Highly Transparent Non Metallic Cathodes", filed Apr. 3, 1998
	PARTHASARATHY et al., U.S. Patent Appln. Scrial No. 08/964,863, "A Highly Transparent Organic Light Emitting—Device Employing a Non-metallic Cathode," filed Nov. 5, 1997.
	M. HIRAMOTO et al., "Effect of Thin Gold Interstitial-layer on the Photovoltaic Properties of Tandem Organic Solar Cell", Chemistry Letters, pp. 327-330 (1990). (no month given)
	N. KARL et al, "Efficient Organic Photovoltaic Cells. The Role of Excitonic Light Collection, Exciton Diffusion to Interfaces, Internal Fields for Charge Separation, and High Charge Carrier Mobilities", Mol. Cryst. Liq. Cryst., Vol. 252, pp. 243-258 (1994). (No Month given)
	G. JORGENSEN et al., "Polymers for Solar-Energy Devices", American Chemical Society, Desk Reference of Functional Polymers. Syntheses and Applications, Chapter 4.2, pp. 567-588 (1997). (no month given
	J. KANICKI, "Polymeric Semiconductor Contacts and Photovoltaic Applications, Handbook of Conducting Polymers, Vol. 1, Chapter 17, pp. 544-660 (1986). (No Month Given)
	C. ARBOUR et al., "Surface Chemistries And Photoelectrochemistries Of Thin Molecular Semiconductor Materials", Mol. Cryst. Liq. Cryst., Vol. 183, pp. 307-320 (1990). (no month given)
	J.B. WHITLOCK et al., "Investigations of Materials and Device Structures for Organic Semiconductor Solar Cells", Optical Engineering, Vol. 32, No. 8, pp. 1921-1934 (Aug. 1993).
	S.R. FORREST et al., "Optical And Electrical Properties of Isotype Crystalline Molecular Organic Heterojunctions", J. Appl. Phys. Vol. 66, No. 12, pp. 5908-5914 (Dec. 1989).
	G. YU, et al., "Photovoltaic Cells Made With Organic Composites", Proceedeings of the Future Generation Photovoltaic Technologies: First NREL Conference, March 1997, American Inst. of Physics, pp. 317-324.
	V. BULOVIC et al., "Photovoltaic Cells Based on Vacuum Deposited Molecular Organic Thin Films", Proceedings of the FutureGeneration Photovoltaic Technologies: First NREL Conference, March 1997, American Inst. of Physics, pp. 235-242.
	National Renewal Energy Laboratory, "Research Opportunities in Photochemical Sciences - Workshop Proceedings - Panel A-1 "Photo Electrochemical and Organic-Based Solar Cells" pp. 142-185, Estes Park, CO, Feb. 5-8, 1996, NREL/CP-450-21097, DE96007867.
Mey	G. YU et al., "Semiconducting Polymers as Materials for Device Applications", 23rd Int'l Conf. On The Physics of Semiconductors, Vol. 1, pp. 35-42, World Scientific, Berlin, Germany, Jul. 21-26, 1996.

32845-1

Maine R. Yamintzky

01/27/00





Sheet 3 of 3 O9/136 34a file 08/1

EXAMINER INITIAL

AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.

Uni-Solar® Energy Generation, http://ovonic.com/engentek.html (Jan. 26, 1998).

S.R. FORREST, "Very High Efficiency Photovoltaic Cells Based on Fully Organic Multiple Quantum Wells", National Renewable Energy Lab, Quarterly Technical Progress Report, 15 Feb. 1995 - 15 May 1995, (Mar. 1997) NREL/SR-520-21882, DE97000063.

Mey

S.R. FORREST, "Ultrathin Organic Films by Organic Molecular Beam Deposition and Related Techniques," Chemical Reviews, American Chemical Society, Vol. 97, No. 6, pp. 1793-1896, September/October 1997.

NUV 2 4 190A

EXAMINER	Marie	R.	Yan	nitzbur	DATE CONSIDERED 01/27/00	auo,
	-	•	71	0 11		•

EXAMINER: Initial if citation considered whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



•	

INFO	RMATION DI	SCLOSURE		Y. DOCKET NO. 0/11901		APPLICA 09/136,34	TION NO. 2
STAT	EMENT BY A	PPLICANT PPO-P449		LICANT REST et al.			
		APR 1 9 1999		NG DATE ust 19, 1998		GROUP A 2875	ART UNIT
		PREVIOU TRADELISTS. P	ATENT	DOCUMENTS			•
EXAMINER INITIAL	PATENT NUMBER	PATENT DATE		NAME	CLASS	SUBCLASS	FILING DATE
410.1	4 002 100	Fabruary 12, 1001	1	Vashilsaus at al		2, 2	

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
MRY	4,992,109	February 12, 1991	Yoshikawa et al.	136	263	
Mky	4,281,053	July 28, 1981	Tang	430	58	
/					F=== 8	
				HE	CEIV	
				Δ	PR 20 19	99
				TECHN	OLOGY CENT	R 2800

FOREIGN PATENT DOCUMENTS

F3/ 13 (D) (FD)						TRANSLA	ATION
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS

EXAMINER INITIAL			AUTHOR, TITLE, D	ATE, PERTINENT	PAGES, ETC.	
EXAMINER	Marie :	R. Yamnitzky			date considered 01/27/00	
	itial if citation c		n is in conformance w		raw line through citation if not in	
					*	-

77996

[•] Kenyon & Kenyon 1996

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
FORM PTO-1449

JC78
JULY S. PATENT DOCKET NO.
10020/11901

APPLICATION NO.
09/136,342

APPLICATION NO.
10020/11901

GROUP ART UNIT
August 19, 1998

JULY S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
NRY	5,350,459	September 27, 1994	Suzuki et al.	136	263	
/			_			

FOREIGN PATENT DOCUMENTS

						TRANSL	ATION
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
Mey	61-251084	November 8, 1986	JP			х	
7							

OTHER DOCUMENTS

EXAMINER INITIAL		AUTHOR	, TITLE, DATE, PERTINENT	Γ PAGES, ETC.	10	
			-		286	<u>R</u>
				-	1.2	Œ
					AIL.	NE S
				-	93 RO	0
"				,	H	_
EXAMINER /	Varie	R. Yamitaky		DATE CONSIDER	RED, 27/00	
EXAMINER: Ini	tial if citation	considered, whether or no citation is in cord. Include copy of this form with next com	formance with M.P.E.P. 609; munication to applicant.	draw line through cit	ation if not in	

96174

C Kenyon & Kenyon 1996





INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
PTO-1449

DOCKET NO. 10020/11901 PE VC.	SERIAL NO. 09/136,342
APPLICANT OF 1809 FE	
FILING DATE CATENTS TRADERS August 19, 1998	GROUP 2879 / 714

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
MRY	4,773,944	September 27, 1988	Nath et al.	136	249	

• - If pertinent

FOREIGN PATENT DOCUMENTS

						TRANSLATION	
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO

OTHER DOCUMENTS

EXAMINER INITIAL	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.

EXAMINER Marie R. Gamuitakey

Date Considered

01/27/00

EXAMINER: Initial if citation considered whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

RECEIVED DEC 0 7 1999

TECHNOLOGY CENTER 2800